



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: AL/MS/FL

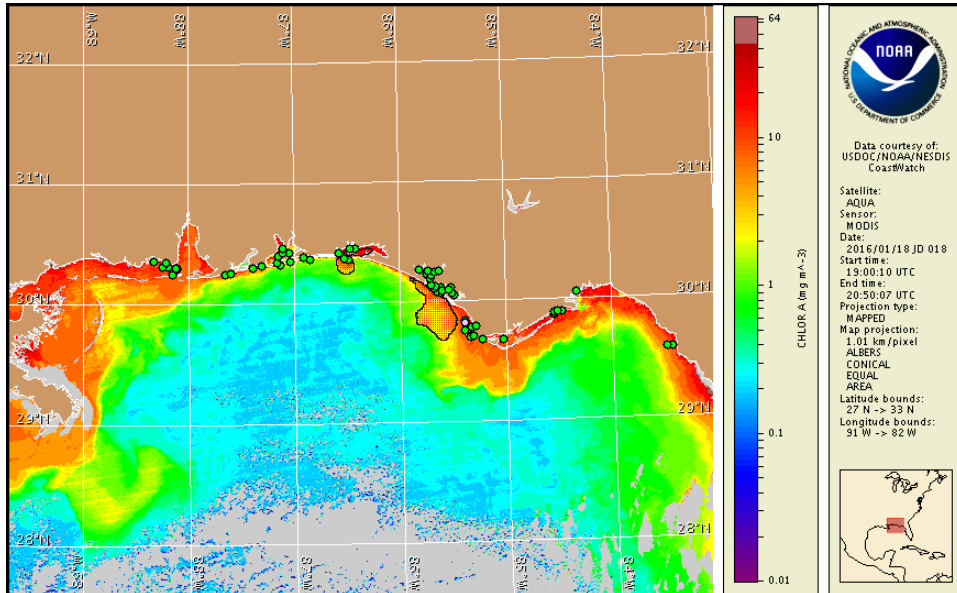
Thursday, 21 January 2016

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Tuesday, January 19, 2016



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from January 11 to 20: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information for Florida can be obtained through FWC Fish and Wildlife Research Institute at:

<http://myfwc.com/redtidestatus>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit at: <http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

Not present to very low concentrations of *Karenia brevis* (commonly known as Florida red tide) are present along- and offshore Mobile and Baldwin counties in Alabama and portions of northwest Florida from Escambia to Franklin counties. *K. brevis* concentrations are patchy in nature and levels of respiratory irritation will vary locally based upon nearby bloom concentrations, ocean currents, and wind speed and direction. The highest level of potential respiratory irritation forecast for alongshore northwest Florida Thursday, January 21 to Monday, January 25 is listed below:

County Region: Forecast (Duration)

Escambia County: Low (Th-F, M), Very Low (Sa-Su)

Gulf County, west bay regions-St. Joseph Bay area: Low (Th-M)

Franklin County, bay regions: Low (Th-M)

All Other NWFL to Alabama County Regions: None expected (Th-M)

SWFL County Regions: Visit <http://tidesandcurrents.noaa.gov/hab/#swfl>

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations. Health information, from the Florida Department of Health and other agencies, is available at http://tidesandcurrents.noaa.gov/hab/hab_health_info.html. Reports of respiratory irritation have been received from Escambia and Franklin counties.

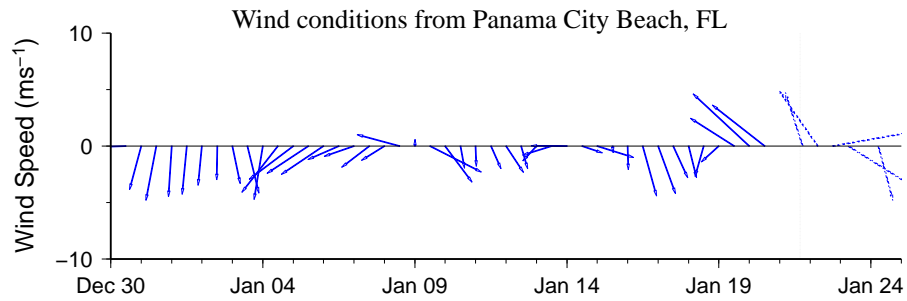
Analysis

Recent samples collected alongshore northwest Florida indicate not present to very low *Karenia brevis* concentrations from Escambia to Franklin counties (FWRI; 1/11-19). Samples collected last week identified background to 'very low' *K. brevis* concentrations within St. Joseph's Bay in Gulf County (FWRI; 1/11-15). All samples collected alongshore Wakulla County and within the bay regions of Bay County indicate that *K. brevis* is not present (FWRI; 1/19). Reports of slight respiratory irritation have been received from Pensacola Beach (Escambia County; 1/16, 1/18) and the bay side of St. George Island (Franklin County; 1/18). Additional sampling in these regions is recommended. Detailed sample information and a summary of impacts can be obtained through FWC Fish and Wildlife Research Institute at: <http://myfwc.com/redtidestatus>.

In recent ensemble imagery (MODIS Aqua, 1/18), patches of elevated to high chlorophyll (2-16 $\mu\text{g/L}$) with the optical characteristics of *K. brevis* are visible along- and offshore from Escambia to Gulf counties, extending up to 10 miles offshore Okaloosa County and 24 miles offshore Bay and Gulf counties.

Westerly winds forecast Friday through Sunday may increase the potential for eastward transport of any remaining surface *K. brevis* concentrations alongshore northwest Florida.

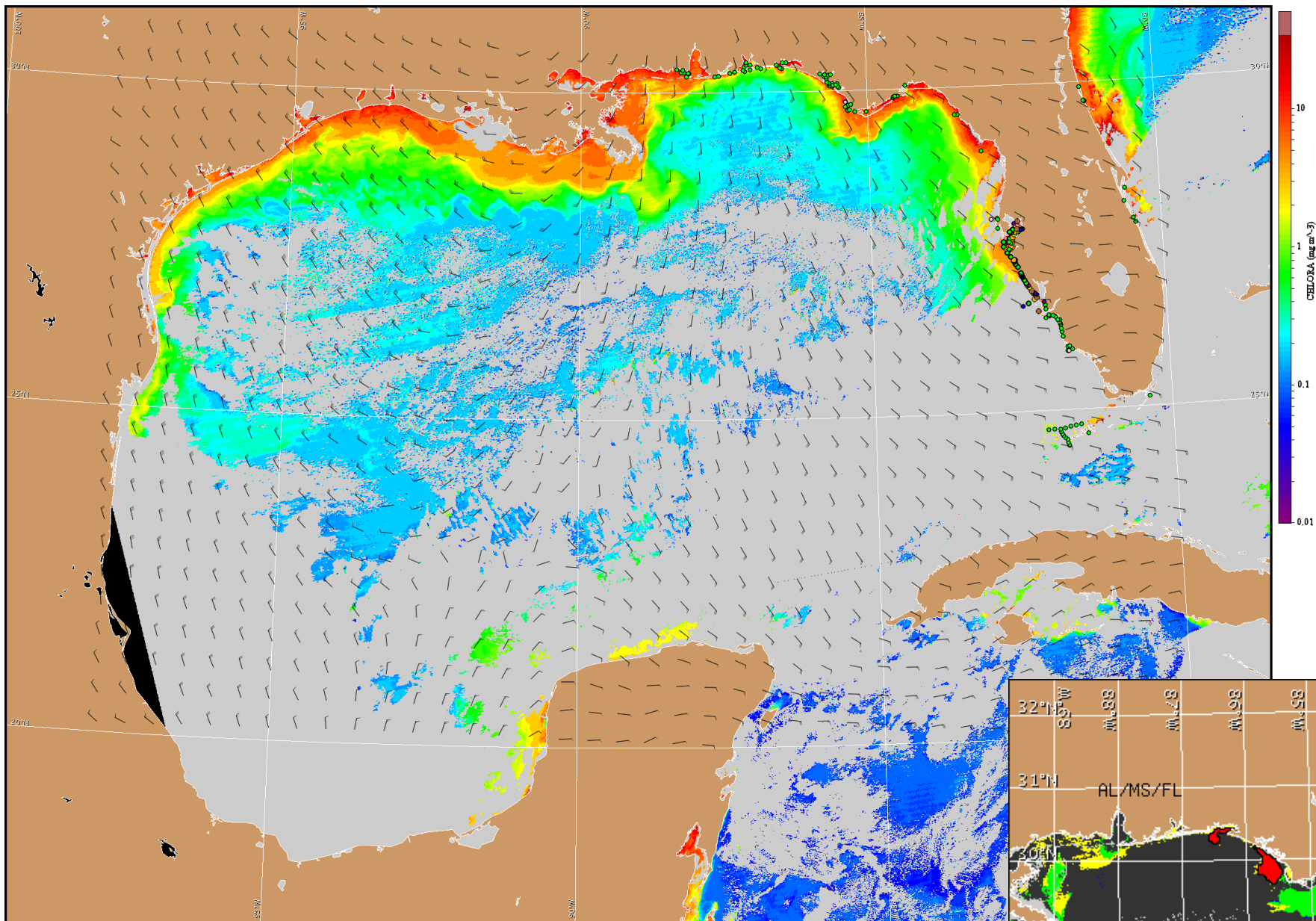
Derner, Keeney



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

Wind Analysis

Escambia to Gulf counties: Southeast winds (15kn, 8m/s) today becoming south (20kn, 10m/s) tonight. West winds (20-25kn, 10-13m/s) Friday becoming northwest (15-25kn, 8-13m/s) Friday night through Sunday. West winds (5-10kn, 3-5m/s) Sunday night. South winds (10kn, 5m/s) Monday.



Satellite chlorophyll image and forecast winds for January 22, 2016 06Z with points representing cell concentration sampling data from January 11 to 20: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Verified and suspected HAB areas shown in red. Other areas with *K. brevis* optical characteristics shown in yellow (see p. 1 analysis for interpretation).